

REMARKS

I. Introduction

As a result of this response, claims 13-15 are added and claim 9 is cancelled. Therefore, claims 7-8 and 10-15 of the present application are pending. Claims 7-8 and 10-12 are amended. Claims 7-12 have been rejected by the Office Action.

In view of the following remarks, it is respectfully submitted that claims 7-8 and 10-15 are allowable, and reconsideration of these claims is respectfully requested.

II. Rejection of Claim 7 Under 35 U.S.C. § 102(b)

Claim 7 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,109,199 to Berger (hereinafter "the Berger reference"). The Applicant respectfully traverses this rejection, for the following reasons.

To anticipate a claim under § 102(b), a single prior art reference must identically disclose each and every claim element. See Lindeman Maschinenfabrik v. American Hoist and Derrick, 730 F.2d 1452, 1458 (Fed. Cir. 1984). If any claimed element is absent from a prior art reference, it cannot anticipate the claim. See Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997). Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claim invention, arranged exactly as in the claim. Lindeman, 703 F.2d 1458 (Emphasis added). Additionally, not only must each of the claim limitations be identically disclosed, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the inventions of the rejected claims, as discussed above. See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986). To the extent that the Examiner may be relying on the doctrine of inherent disclosure for the anticipation rejection, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; see also Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

Independent claim 7 is directed to a switch assembly for "*switching off at least one airbag*." Claim 7, as presented, includes the features of "*two identical contactless sensors*,"

including a first sensor and a second sensor, each configured to detect a switching state of the switch.” Claim 7, as presented, also includes the features of “a first resistor network, comprising a first resistor, connected to an output of the first sensor; and a second resistor network, comprising a second resistor, connected to an output of the second sensor.” Claim 7 further includes the features that “resistors of the first and second resistor networks are connected in such a way that a possible range of an electrical characteristic quantity, to be evaluated at an output of the first sensor for detecting the switching state of the switch, does not overlap a possible range of the electrical characteristic quantity, to be evaluated at an output of the second sensor for detecting the switching state of the switch, for any switching state of the switch.” The Berger reference does not identically disclose (or even suggest) at least the above-identified claim features, as explained in detail below.

First, the Berger reference does not disclose the feature of “two identical contactless sensors, including a first sensor and a second sensor, each configured to detect a switching state of the switch.” The Office Action relies upon conductor bridges 14A and 14B of the Berger reference to teach the two identical sensors. However, conductor bridges 14A and 14B are not contactless sensors; instead, the Berger reference states:

“The device according to the invention as shown in FIG. 2 has a switch 10 with switching finger 11 that has a first contact element 12. The switching finger 11 can assume two stable end positions. The contact element 12 either bears against a second contact element 13A (for instance a make contact element) or against a rest bearing, or an opposite third contact element 13B (for instance a break contact element). The second and third contact elements 13A and 13B are secured electrically to conductor bridges 14A and 14B respectively.” (col. 2, lines 54-63, emphasis added)

Thus, the conductor bridges 14A and 14B operate in conjunction with contact elements 13A and 13B, which make contact with contact element 12 of switching finger 11. Therefore, the Berger reference does not disclose two identical contactless sensors.

Second, the Berger reference also does not identically disclose (or even suggest) the claim features that “resistors of the first and second resistor networks are connected in such a way that a possible range of an electrical characteristic quantity, to be evaluated at an output of the first sensor for detecting the switching state of the switch, does not overlap a possible range of the electrical characteristic quantity, to be evaluated at an output of the second sensor for detecting the switching state of the switch, for any switching state of the switch.”

That is, the Berger reference does not disclose that resistors are connected to the outputs of the sensors in such a way that that a possible range of an electrical quantity evaluated at an output of the first sensor (for detecting the switching state of the switch) does not overlap the possible range of the quantity evaluated at an output of the second sensor for any state of the switch. Regarding the non-overlapping ranges, the Office Action states (in connection with previously presented claim 9): “*Berger teaches voltage is the electrical quantity measured, since this is only one quantity it therefore cannot overlap.*” However, claim 7, as presented, now recites that an electrical quantity is evaluated at the outputs of both the first and second sensors. Therefore, the argument of the Office Action is no longer valid because claim 7 now clearly recites two different evaluable quantities. The Applicants further submit that the Berger reference is silent regarding non-overlapping possible ranges of the characteristic electrical quantity evaluated at the outputs of the first and second sensors (to determine the switching state).

Therefore, for at least the foregoing reasons, independent claim 7 is not anticipated by the Berger reference, and withdrawal of this rejection is respectfully requested.

III. Rejection of Claims 8-9 Under 35 U.S.C. § 103(a)

Claims 8-9 were rejected under 35 U.S.C. § 103(a) over the Berger reference in view of U.S. Patent No. 5,982,048 to Fendt et al. (hereinafter “the Fendt reference”). Claim 9 has been canceled. The Applicant respectfully traverses the rejection of claim 8, for the following reasons.

In rejecting a claim for obviousness under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine the reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Applicant notes that claim 8 depends directly from independent claim 7. As discussed above, claim 7 is not anticipated by the Berger reference. In addition, the Fendt reference fails to remedy the deficiencies of the Berger reference as applied against parent claim 7. Specifically, the Fendt reference also fails to disclose, or even suggest, at least the claim features that “resistors of the first and second resistor networks are connected in such a way that a possible range of an electrical characteristic quantity, to be evaluated at an output of the first sensor for detecting the switching state of the switch, does not overlap a possible range of the electrical characteristic quantity, to be evaluated at an output of the second sensor for detecting the switching state of the switch, for any switching state of the switch.” For example, the table at col. 4, lines 35-39, of the Fendt reference clearly shows that resistance values RH_1 , RH_2 , RS_{11} , RS_{12} , RS_{21} and RS_{22} are not differentiated with respect to passenger side versus drivers side Hall sensors H_1 and H_2 . Therefore, the Fendt reference does not disclose, or even suggest, non-overlapping possible ranges of the characteristic electrical quantity evaluated at the output of the two identical contactless sensors to determine the switching state.

Therefore, for at least the foregoing reasons, independent claim 7 and its dependent claim 8 are patentable over the Berger reference in view of the Fendt reference, and withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 10-12 Under 35 U.S.C. § 103(a)

Claims 10-12 were rejected under 35 U.S.C. § 103(a) over the Berger reference in view of the Fendt reference, and further in view of U.S. Patent No. 6,593,758 to Mulera et al. (hereinafter “the Mulera reference”). The Applicant respectfully traverses this rejection, for the following reasons.

Applicant notes that claims 10-12 depend directly or indirectly from independent claim 7. As discussed above, claim 7 is patentable over the Berger reference in view of the Fendt reference. In addition, the Mulera reference fails to remedy the deficiencies of the Berger and Fendt references as applied against parent claim 7. For example, the Mulera reference also fails to disclose, or even suggest, at least the claim features that “resistors of the first and second resistor networks are connected in such a way that a possible range of an electrical characteristic quantity, to be evaluated at an output of the first sensor for detecting

the switching state of the switch, does not overlap a possible range of the electrical characteristic quantity, to be evaluated at an output of the second sensor for detecting the switching state of the switch, for any switching state of the switch.” Firstly, the Mulera reference does not disclose evaluating a characteristic electrical quantity at the outputs of sensors. That is, the Mulera reference does not disclose evaluating a characteristic electrical quantity at the outputs of switches 11, 12 and 13 shown in FIG. 1; instead, output voltage V1 is sensed at the outputs of resistors 21, 21, 22, and 23, and output voltage V2 is sensed at the outputs of resistors 30, 31, 32, and 33. Secondly, the Mulera reference also does not disclose evaluating the switching state of a switch via non-overlapping ranges of a characteristic electrical quantity evaluated at two different outputs. That is, the output voltages V1 and V2 are not non-overlapping; instead, if the system of the Mulera reference is functioning correctly, they are identical.

Therefore, for at least the foregoing reasons, independent claim 7, and thus dependent claims 10-12, are patentable over the Berger reference in view of the Fendt reference and further in view of the Mulera reference, and withdrawal of this rejection is respectfully requested.

V. New Claims

New claim 13 depends from independent claim 7, and therefore claim 13 is patentable over the cited references at least for the reasons already discussed above in connection with claim 7. New independent claims 14 and 15 contain similar features to those of claim 7 discussed above, and therefore claims 14 and 15 are patentable at least for reasons already discussed above in connection with claim 7. For example, the cited references do not disclose, or even suggest, at least the feature that “the first and second interconnection circuits determine that a first possible voltage range appearing at an output of the first sensor does not overlap a second possible voltage range appearing at an output of the second sensor for any switching state of the switch,” as presented in claim 14, and the feature of “connecting the first and second sensors, via first and second interconnection circuits, to a signal evaluation unit, wherein a possible voltage range of a first voltage appearing at an output of the first sensor does not overlap a possible voltage range of a second voltage appearing at an output of the second sensor for any switching state of the switch,” as presented in claim 15.

CONCLUSION

Applicant respectfully submits that all pending claims of the present application are now in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited.

The Office is authorized to charge any fees associated with this Amendment to Kenyon & Kenyon LLP's Deposit Account No. 11-0600.

Respectfully submitted,

 (R. No. 36,197)

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